

Illustrative render generated from published specifications

14.1 × 50.1 mm
24 g

Vapcell K10

Vapcell

14500

NMC

MOOCH-TESTED · 8 A

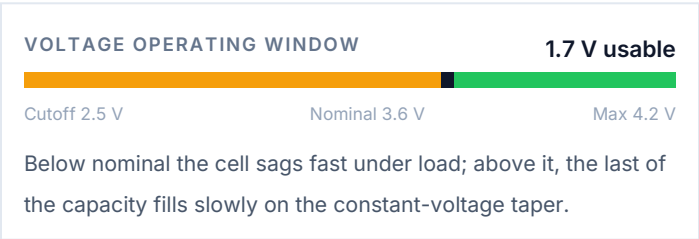


Live page & updates

1,000 mAh CAPACITY	8 A MOOCH CONTINUOUS	3.6 V NOMINAL · 2.5 – 4.2 V	3.6 Wh ENERGY · 150 WH/KG
--	--	---	---

REFERENCE ONLY — NOT AN OFFICIAL DOCUMENT

This information is gathered from multiple sources, including manufacturer datasheets, independent third-party testing, and community contributions. Cell specifications vary between production batches and change over time, and no figure here is guaranteed to be correct or current. **Always consult the manufacturer's spec sheet directly.** Use this sheet for reference only — never as the sole basis for a safety-critical decision about charging, discharging, or assembling cells. The cell image is an illustrative render generated from published specifications, not a photograph.



APPLICATION SUITABILITY

Rule-of-thumb ratings from this cell's capacity and continuous discharge. Check your own load before committing.

Powerwalls	Too low capacity for practical powerwall use. You'd need too many cells.
Ebike packs	Not enough discharge for ebike use. Voltage sag would be a problem under load.
Car audio	Not enough discharge for car audio amplifiers. You need at least 15-20A continuous for most setups.
High-drain vaping	Below the 25A Mooch CDR threshold that high-drain vaping needs. Use a higher-drain cell.
Flashlights	Lower capacity means shorter runtime. Better cells are available for flashlight use.
Power tools	Not enough discharge or capacity for power tool use.

IDENTITY		PHYSICAL	
Manufacturer	Vapcell	Diameter	14.1 mm
Model	K10	Length	50.1 mm
Format	14500	Weight	24 g
Chemistry	NMC	ELECTRICAL	
Wrap colour	Red		
Terminal	Flat top		
Protection	Unprotected		
ENERGY & POWER DENSITY			
Energy	3.6 Wh	Energy	3.6 Wh
Specific energy	150 Wh/kg	Internal resistance	25 mΩ
Volumetric density	460.19 Wh/L	Max continuous discharge	8 A (mooch)
Power density (mass)	1,200 W/kg	Discharge C-rate	8C
Power density (volume)	3,682 W/L	Standard charge current	500 mA
Capacity ranking	#1 of 2 14500s	Typical charge time	2 h

C-RATE CONVERSION · 1,000 MAH

C-RATE	CURRENT	THEORETICAL RUNTIME
0.2C	0.2 A	5h 00m
0.5C	0.5 A	2h 00m
1C	1 A	1h 00m
2C	2 A	30m
3C	3 A	20m
5C	5 A	12m
8C	8 A	7m 30s

Highlighted row is closest to the rated 8 A continuous discharge.

CHARGING

RATE	CURRENT	ESTIMATED TIME TO FULL
0.5C	500 mA	~2h 00m

1C

1,000 mA

~1h 00m

Constant-current phase only. Real charge time runs longer because of the constant-voltage taper at the end.

SERIES PACK CONFIGURATIONS

Voltages calculated from this cell's own nominal and maximum charge voltage. The 3P columns show one common parallel count as a worked example — scale the parallel group to the capacity you need.

SERIES	NOMINAL	FULLY CHARGED	CELLS AT 3P	CAPACITY	ENERGY
3S	10.8 V	12.6 V	9	3 Ah	32 Wh
7S	25.2 V	29.4 V	21	3 Ah	76 Wh
10S	36 V	42 V	30	3 Ah	108 Wh
13S	46.8 V	54.6 V	39	3 Ah	140 Wh
14S	50.4 V	58.8 V	42	3 Ah	151 Wh

EXAMPLE PACKS

7S2P 24V ebike / small pack 14 cells · 25.2 V 2,000 mAh · 50 Wh 16 A max · ≈0.34 kg cells	13S4P 48V ebike standard 52 cells · 46.8 V 4,000 mAh · 187 Wh 32 A max · ≈1.25 kg cells	16S4P DIY powerwall 64 cells · 57.6 V 4,000 mAh · 230 Wh 32 A max · ≈1.54 kg cells	4S6P Power tool replacement 24 cells · 14.4 V 6,000 mAh · 86 Wh 48 A max · ≈0.58 kg cells
--	--	---	--

SIMILAR CELLS

Same format and chemistry, within ±500 mAh.

CELL	MAH	CONTINUOUS	WH	WEIGHT	WH/KG
Vapcell K10 (this cell)	1,000	8 A	3.6	24 g	150
Vapcell H10	1,000	10 A	3.6	24 g	150

HANDLING & SAFETY

- Never charge above 4.2V or discharge below 2.5V.
- Store cells at around 3.6-3.8V (roughly 40-60% charge) for long-term storage.
- Don't mix cells with different capacities, chemistries, or states of charge in a pack.
- Inspect wraps before use. A torn wrap can cause a short circuit.
- Always use a BMS or balance charger appropriate for your pack configuration.
- Keep cells away from metal objects, keys, and coins. A short across the terminals can cause fire.

SOURCES & FURTHER READING

Cell Savors page	cellsaviors.com/cell-database/vapcell-k10
Independent test (Mooch)	https://www.e-cigarette-forum.com/threads/bench-test-results-v...
Full cell database	cellsaviors.com/cell-database